## **CLAIMS**

What is claimed is:

1. A method for creating a simulation comprising the steps of:

monitoring communication between an end device and a real device during a communication sequence, said communication comprising a plurality of line-commands from said end device that are directed to said real device, and a plurality of outputs from said real device, each of said plurality of outputs generated in response to one of said plurality of line-commands;

capturing said communication between said end device and said real device; and

generating a simulation application based on said communication associated with said communication sequence, said simulation application able to present an identical output from said real device that corresponds to a particular line-command from said plurality of line-commands.

2. The method as described in Claim 1, wherein said method comprises the further step of:

summarizing said plurality of line commands in a summary list, said summary list comprising each of said plurality of line-commands as inputted into said real device along with a corresponding description.

3. The method as described in Claim 1, wherein said method comprises the further step of:

grouping said plurality of line-commands into a series of steps, each of said series of steps comprising at least one line-command from said plurality of line-commands.

4. The method as described in Claim 1, wherein said method comprises the further step of:

editing of said plurality of line-commands, said plurality of line-commands reflecting and including edited line-commands.

5. The method as described in Claim 4, wherein said method comprises the further step of:

introducing new line-commands into corresponding steps from said series of steps.

6. The method as described in Claim 5, wherein said method comprises the further steps of:

providing step text for each of said series of steps, said step text including a short description associated with a corresponding step from said series of steps; and

providing step detail for each of said series of steps, said step detail including detailed instructions and information associated with a corresponding step from said series of steps.

7. The method as described in Claim 6, wherein said method comprises the further step of:

re-running said communication sequence, such that said plurality of line-commands are inputted into said real device, said plurality of line-commands including edited line-commands and said new line-commands.

8. The method as described in Claim 7, wherein said method comprises the further step of:

checking for invalid line-commands.

9. The method as described in Claim 8, wherein said method comprises the further step of:

determining all permutations for each of said series of steps, wherein each permutation comprises a unique combination and order of line-commands and their corresponding outputs from said real device.

10. The method as described in Claim 9, wherein said simulation application is an exercise that simulates a real-life interaction with said real device, said simulation application presenting real-life outputs to command-line inputs into said real device in a simulated environment, said real-life outputs corresponding to said plurality of outputs as determined by said method, said real-life outputs

presented along with said step text and said step detail in an instructional exercise format.

- 11. The method as described in Claim 9, wherein said method is performed at a server coupled to said end device and said real device.
- 12. A method for creating a simulation comprising the steps of:

monitoring communication between an end device and a real device during a communication sequence, said communication sequence relating to a real-life interaction with said real device, said communication comprising a plurality of inputs from said end device that is directed to said real device, and a plurality of outputs from said real device to said plurality of inputs, each of said plurality of outputs generated in response to one of said plurality of inputs;

capturing said communication between said end device and said real device;

determining all permutations for said communication sequence, forming a plurality of permutations for said communication sequence, each of said plurality of permutation comprising a unique combination and order of inputs and their corresponding outputs; and

generating a simulation application based on said communication associated with said communication sequence,

said simulation application able to present an identical output to a particular input corresponding to a particular permutation for said communication sequence.

13. The method as described in Claim 12, wherein said method comprises the further steps of:

checking for invalid inputs in said plurality of inputs; and

providing notification at said end device of said invalid inputs.

14. The method as described in Claim 12, wherein said method comprises the further steps of:

flagging predetermined items of interest; and providing notification at said end device of said predetermined items of interest.

15. The method as described in Claim 12, wherein said method comprises the further steps of:

querying said real device for the full syntax of each input in said plurality of inputs; and

replacing each input with their corresponding full syntax.

16. The method as described in Claim 12, wherein said method is performed at a server coupled to said end device and said real device.

- 17. The method as described in Claim 12, wherein said real device is any Internet network device.
- 18. The method as described in Claim 12, wherein said real device is an Internet content provider.
- 19. The method as described in Claim 12, wherein said communication is in the form of a command-line interface with line-commands, each of said plurality of inputs corresponding to one of a plurality of line-commands.
- 20. The method as described in Claim 19, wherein said method comprises the further steps of:

grouping said plurality of line-commands into a series of steps, each of said series of steps comprising at least one line-command from said plurality of line-commands;

editing of said plurality of line-commands, said plurality of line-commands reflecting and including edited line-commands;

introducing new line-commands into corresponding steps
from said series of steps;

providing step text for each of said series of steps, said step text including a short description associated with a corresponding step from said series of steps;

providing step detail for each of said series of steps, said step detail including detailed instructions and

information associated with a corresponding step from said series of steps;

re-running said communication sequence, such that said plurality of line-commands are inputted into said real device, said plurality of line-commands including edited line-commands and said new line-commands;

checking for invalid line-commands; and
automatically determining all permutations for each of
said series of steps, wherein each permutation comprises a
unique combination and order of line-commands and their
corresponding outputs from said real device.

- 21. The method as described in Claim 20, wherein said simulation application is a computer based exercise that simulates said real-life interaction with said real device, said simulation application presenting real-life outputs to command-line inputs into said real device in a simulated environment, said real-life outputs as determined by said method, said real-life outputs presented along with said step text and said step detail in an instructional exercise format.
- 22. A computer system comprising a processor, a memory unit, and a display screen wherein said memory contains instructions that when executed implement a method of creating a simulation comprising the steps of:

monitoring communication between an end device and a real device during a communication sequence, said communication comprising a plurality of line-commands from said end device that are directed to said real device, and a plurality of outputs from said real device, each of said plurality of outputs generated in response to one of said plurality of line-commands;

capturing said communication between said end device and said real device; and

generating a simulation application based on said communication associated with said communication sequence, said simulation application able to present an identical output from said real device that corresponds to a particular line-command from said plurality of line-commands.

23. The computer system as described in Claim 22, wherein said method comprises the further step of:

summarizing said plurality of line commands in a summary list, said summary list comprising each of said plurality of line-commands as inputted into said real device along with a corresponding description.

24. The computer system as described in Claim 22, wherein said method comprises the further step of:

grouping said plurality of line-commands into a series of steps, each of said series of steps comprising at least one line-command from said plurality of line-commands.

- 25. The computer system as described in Claim 22, wherein said method comprises the further step of:
  editing of said plurality of line-commands, said
  plurality of line-commands reflecting and including edited
  line-commands.
- 26. The computer system as described in Claim 25, wherein said method comprises the further step of:

introducing new line-commands into corresponding steps from said series of steps.

27. The computer system as described in Claim 26, wherein said method comprises the further steps of:

providing step text for each of said series of steps, said step text including a short description associated with a corresponding step from said series of steps; and

providing step detail for each of said series of steps, said step detail including detailed instructions and information associated with a corresponding step from said series of steps.

28. The computer system as described in Claim 27, wherein said method comprises the further step of:

re-running said communication sequence, such that said plurality of line-commands are inputted into said real

device, said plurality of line-commands including edited line-commands and said new line-commands.

- 29. The computer system as described in Claim 28, wherein said method comprises the further step of: checking for invalid line-commands.
- 30. The computer system as described in Claim 29, wherein said method comprises the further step of:

determining all permutations for each of said series of steps, wherein each permutation comprises a unique combination and order of line-commands and their corresponding outputs from said real device.

- 31. The computer system as described in Claim 30, wherein said simulation application is an exercise that simulates a real-life interaction with said real device, said simulation application presenting real-life outputs to command-line inputs into said real device in a simulated environment, said real-life outputs corresponding to said plurality of outputs as determined by said method, said real-life outputs presented along with said step text and said step detail in an instructional exercise format.
- 32. The computer system as described in Claim 30, wherein said method is performed at a server coupled to said end device and said real device.

33. A computer-readable medium comprising computerexecutable instructions for performing a method of creating a
simulation, said method comprising the steps of:

monitoring communication between an end device and a real device during a communication sequence, said communication comprising a plurality of line-commands from said end device that are directed to said real device, and a plurality of outputs from said real device, each of said plurality of outputs generated in response to one of said plurality of line-commands;

capturing said communication between said end device and said real device; and

generating a simulation application based on said communication associated with said communication sequence, said simulation application able to present an identical output from said real device that corresponds to a particular line-command from said plurality of line-commands.

34. The computer-readable medium as described in Claim 33, wherein said method comprises the further step of:

summarizing said plurality of line commands in a summary list, said summary list comprising each of said plurality of line-commands as inputted into said real device along with a corresponding description.

35. The computer-readable medium as described in Claim
33, wherein said method comprises the further step of:
grouping said plurality of line-commands into a series

of steps, each of said series of steps comprising at least one line-command from said plurality of line-commands.

- 36. The computer-readable medium as described in Claim 33, wherein said method comprises the further step of:
  editing of said plurality of line-commands, said plurality of line-commands reflecting and including edited line-commands.
- 37. The computer-readable medium as described in Claim 36, wherein said method comprises the further step of: introducing new line-commands into corresponding steps from said series of steps.
- 38. The computer-readable medium as described in Claim 37, wherein said method comprises the further steps of:

providing step text for each of said series of steps, said step text including a short description associated with a corresponding step from said series of steps; and

providing step detail for each of said series of steps, said step detail including detailed instructions and information associated with a corresponding step from said series of steps.

39. The computer-readable medium as described in Claim 38, wherein said method comprises the further step of:

automatically re-running said communication sequence, such that said plurality of line-commands are inputted into said real device, said plurality of line-commands including edited line-commands and said new line-commands.

- 40. The computer-readable medium as described in Claim 39, wherein said method comprises the further step of: checking for invalid line-commands.
- 41. The computer-readable medium as described in Claim 40, wherein said method comprises the further step of:

determining all permutations for each of said series of steps, wherein each permutation comprises a unique combination and order of line-commands and their corresponding outputs from said real device.

42. The computer-readable medium as described in Claim 41, wherein said simulation application is an exercise that simulates a real-life interaction with said real device, said simulation application presenting real-life outputs to command-line inputs into said real device in a simulated environment, said real-life outputs corresponding to said plurality of outputs as determined by said method, said real-life outputs presented along with said step text and said step detail in an instructional exercise format.

- 43. The computer-readable medium as described in Claim 41, wherein said method is performed at a server coupled to said end device and said real device.
- 44. A simulation authoring mechanism for creating a simulation comprising:

means for monitoring communication between an end device and a real device during a communication sequence, said communication comprising a plurality of line-commands from said end device that are directed to said real device, and a plurality of outputs from said real device, each of said plurality of outputs generated in response to one of said plurality of line-commands;

means for capturing said communication between said end device and said real device; and

means for generating a simulation application based on said communication associated with said communication sequence, said simulation application able to present an identical output from said real device that corresponds to a particular line-command from said plurality of line-commands.

45. The simulation authoring mechanism as described in Claim 44, further comprises:

means for summarizing said plurality of line commands in a summary list, said summary list comprising each of said

plurality of line-commands as inputted into said real device along with a corresponding description.

46. The simulation authoring mechanism as described in Claim 44, further comprising:

means for grouping said plurality of line-commands into a series of steps, each of said series of steps comprising at least one line-command from said plurality of line-commands.

47. The simulation authoring mechanism as described in Claim 44, further comprising:

means for editing of said plurality of line-commands, said plurality of line-commands reflecting and including edited line-commands.

48. The simulation authoring mechanism as described in Claim 47, further comprising:

means for introducing new line-commands into corresponding steps from said series of steps.

49. The simulation authoring mechanism as described in Claim 48, further comprising:

means for providing step text for each of said series of steps, said step text including a short description associated with a corresponding step from said series of steps; and

means for providing step detail for each of said series of steps, said step detail including detailed instructions and information associated with a corresponding step from said series of steps.

50. The simulation authoring mechanism as described in Claim 49, further comprising:

means for re-running said communication sequence, such that said plurality of line-commands are inputted into said real device, said plurality of line-commands including edited line-commands and said new line-commands.

51. The simulation authoring mechanism as described in Claim 50, further comprising:

means for checking for invalid line-commands.

52. The simulation authoring mechanism as described in Claim 51, further comprising:

means for determining all permutations for each of said series of steps, wherein each permutation comprises a unique combination and order of line-commands and their corresponding outputs from said real device.

53. The simulation authoring mechanism as described in Claim 52, wherein said simulation application is an exercise that simulates a real-life interaction with said real device, said simulation application presenting real-life outputs to

command-line inputs into said real device in a simulated environment, said real-life outputs corresponding to said plurality of outputs as determined by said method, said real-life outputs presented along with said step text and said step detail in an instructional exercise format.